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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,137	07/12/2001	Andrew Robert Oakley	31229-173019	8041
26694	7590	10/29/2008		
VENABLE LLP P.O. BOX 34385 WASHINGTON, DC 20043-9998			EXAMINER PESIN, BORIS M	
			ART UNIT 2174	PAPER NUMBER
			MAIL DATE 10/29/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/889,137	Applicant(s) OAKLEY ET AL.	
	Examiner BORIS PESIN	Art Unit 2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-33, 37 and 38 is/are allowed.
- 6) ☒ Claim(s) 34-36 and 39-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This communication is responsive to the amendment filed 7/24/2008.

Claims 21-42 are pending in this application. Claims 21, 27, 30, and 34-42 are independent claims. In the amendment filed 7/24/2008, claims 1-20 were canceled and claims 21-42 were added as new. This action is made Non-Final.

Claim Objections

Claims 39 and 42 objected to because of the following informalities: Claims 39 and 42 appear to be identical. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa (US 6683628) in view of Schindler (US 6920614) further in view of Krumholz (US 4538993).

In regards to claim 34, Nakagawa teaches an interactive display system comprising: a projector; a device onto which an image is projected from the projector; a computing means; a pointing device (See Figure 4), in which system: the computing means is arranged to supply image information to the device onto which an image is projected from the projector (See Figure 4). Nakagawa further teaches that the device onto which an image is projected from the projector includes position indication means for determining the position of the pointing device relative to a surface of the device onto which an image is projected from the projector; and the device onto which an image is projected from the projector is a communication hub of the system, arranged to: receive control signals from the pointing device; and transmit the control signals from the pointing device and the plurality of remote signaling devices to the computing means (See Figure 4).

Nakagawa does not specifically teach a plurality of remote signaling devices operable to transmit signals to a receiver portion of the device onto which an image is projected from the projector. Schindler teaches remote signaling devices in which the plurality of remote signaling device are operable to transmit signals to a receiver portion of the device onto which an image is projected, the device onto which an image is projected being arranged to supply the signals to the computing means, said signals being stored by the computing means for display(*"Apparatus for controlling the material*

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*displayed on a personal computer home entertainment system, comprising: **a plurality of remote control devices for providing command signals**; a personal computer further comprising: a processor; a main memory; a bus connecting the processor to the main memory; a display adapter coupled to the bus; a display driven by the display adapter; a circuit coupled to the bus for receiving signals from the plurality of remote control devices and decoding the signals to determine the commands, including cursor control signals, wherein the processor receives the cursor control information from the cursor control device and controls the position of a cursor on the display” (Claim 30)).*

Schindler further teaches that, “*While the system has been described in terms of a personal computer, it is easily modified to encompass a settop box version, where all the circuitry is integrated into one or two cards in a box designed to sit on top of a television having VGA input. In another version, all the circuitry is included inside of the television chassis.*” (Column 21, Lines 11-16). Thus Schindler teaches that the display device (the television) can be the communications hub that arranged to receive signals from a plurality of remote devices.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nakagawa with the teachings of Schindler and include a plurality of remote control devices with the motivation to provide the user with a plurality of remote control devices with the motivation to provide the user with an easier method of controlling a cursor on the screen and to provide the user(s) the ability to not stand right next to the screen as he would have to if he was only using a pointing device.

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Schindler-Nakagawa do not specifically teach a plurality of remote signaling devices operable to transmit signals to a receiver portion of the device onto which an image is projected from the projector only in response to a request signal from the device onto which an image is projected from the projector. Krumholz teaches that, "interrupt row enable the teacher to cut off reception of particular student computer outputs" Column 4, Line 11). Thus Krumholz teaches blocking input to a receiver portion unless the receiver allows for signals to be sent. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nakagawa-Schindler with the teachings of Krumholz and include a method to enable remote signaling devices with the motivation to have easy control of who gets control of the screen at a given time.

Schindler-Nakagawa-Krumholz do not specifically teach transmitting signals on a single communications link, which link is capable of conveying signals both from the pointing device and the remote signaling devices, in order to control an image on the device onto which an image is projected from the projector. Montlick teaches, "*One or more portable pen-based computers are provided with wireless communication capability for connecting with the central computer system through the wireless network.*" (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nakagawa-Schindler-Krumholz with the teachings of Montlick and include a single communications link with the motivation to provide for greater portability.

Claims 35 and 36 are similar in scope to claim 34; therefore they are rejected under similar rationale.

Claims 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa-Schindler-Montlick as applied to claim 34 above, and further in view of Ho et al. (US 6699043).

Claim 39 is similar in scope to claim 34, with respect to the teachings of Nakagawa-Schindler-Montlick. However, claim 39 adds the limitation "to request information from each remote signaling device in turn, by polling." Nakagawa-Schindler-Montlick do not specifically teach polling a device. Ho teaches "the sensor 110 in this embodiment is implemented through software, which periodically, such as every two seconds, polls the operating system or the device drivers of the position-pointing device. The polling determines if there have been any inputs." (Column 8, Lines 27-31). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Nakagawa-Schindler-Montlick with the teachings of Ho and include a polling mechanism with the motivation to provide for a better system of recognizing input.

Claims 40-42 are similar in scope to claim 39; therefore they are rejected under similar rationale.

Allowable Subject Matter

Claims 21-33 and 37-38 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: In regards to independent claims, the prior art found does not teach "the pointing device is operable to: take precedence over the remote signaling devices; and selectively enable each remote signaling device;" in combination with all of the other claim limitations.

All dependent claims are allowable because of their dependence on the allowable independent claims.

Response to Arguments

Applicant's arguments with respect to claims 34-36 and 39-42 have been considered but are moot in view of the new ground(s) of rejection.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BORIS PESIN whose telephone number is (571)272-4070. The examiner can normally be reached on Monday-Friday except every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Boris Pesin/
Examiner, Art Unit 2174